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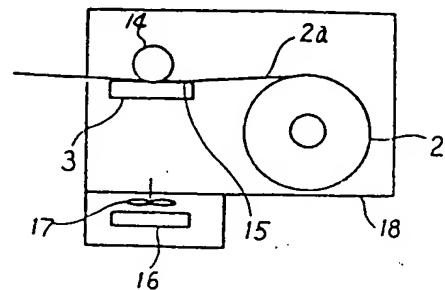
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(54) METHOD AND APPARATUS FOR MANUFACTURING HEAT-SENSITIVE STENCIL PLATE

(11) 2-150351 (A) (43) 8.6.1990 (19) JP  
 (21) Appl. No. 63-304767 (22) 30.11.1988  
 (71) RICOH CO LTD (72) MASAYASU NONOGAKI  
 (51) Int. Cl<sup>s</sup>. B41C1/055//B41L13/02

**PURPOSE:** To easily control the heating temperature and to improve the reliability and safety of a heat-sensitive stencil plate manufacturing apparatus by preliminarily heating a base paper of a heat-sensitive stencil plate by a heat generating body before and image is formed by a heat generating element.

**CONSTITUTION:** A heat generating body 16 and a fan 17 are always kept ON, so that a heated air is blasted against a cover body 18 enclosing a thermal head 3, a latent roller 14 and a roll 2 of base papers of heat-sensitive stencil plates thereby to maintain the temperature inside the covering body 18 constant. A set temperature at the temperature sensor 15 is changed by various kinds of physical properties of a film which is a main material for a base paper 2a of a heat-sensitive stencil plate. The temperature immediately before the perforation formed by a thermal head 3 can be 30°C to a value lower than a melting point of the film. The base paper 2a is pre-heated by the heat generating body 16. Therefore, in accordance with the improvement in the perforation property caused by the heating element of the thermal head, the seasonal change in the environmental temperature wherein the manufacturing apparatus of the title device is placed, hardly affects it.

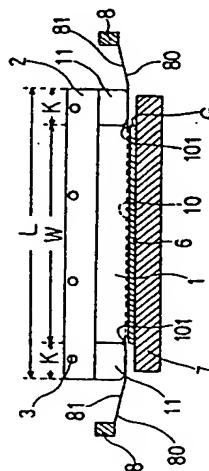


(54) SQUEEGEE FOR SCREEN PRINTING

(11) 2-150352 (A) (43) 8.6.1990 (19) JP  
 (21) Appl. No. 63-305062 (22) 1.12.1988  
 (71) NIPPON DENSO CO LTD (72) HISANAO KOJIMA (3)  
 (51) Int. Cl<sup>s</sup>. B41F15/44, H05K3/12

**PURPOSE:** To obtain a squeegee for screen printing free from the occurrence of an omission or an abrasion loss such as a flaw on a printing surface and superior in durability by a method wherein a squeegee body is longer in width than a medium to be printed, the printing surface has the same width as the medium to be printed, and a cutout is provided on each side of the printing surface.

**CONSTITUTION:** A screen plate 8 is loaded on a material to be printed 6, such as a printed wiring board, loaded on a printing mount 7. A squeegee is moved in a direction of an arrow while applying a constant pressure on a mesh cloth 80 in the screen plate 8 and spreading a printing ink 5. At this time, the squeegee has a printing surface 10 with the same width as a width W of the material to be printed 6, furthermore having a cutout part 101 and a flange part 11 on each side thereof. In this manner, the both ends of the printing surface 10 never strongly abut on end faces G of the medium to be printed 6, therefore being free from the application of large frictional force and deformation stress. Therefore, the printing surface 10 of a squeegee body 1 is free from the occurrence of an omission or an abrasion loss such as a flaw.



(54) INK JET HEAD

(11) 2-150353 (A) (43) 8.6.1990 (19) JP  
 (21) Appl. No. 63-303835 (22) 30.11.1988  
 (71) NEC HOME ELECTRON LTD (72) MITSUO NAGAMORI  
 (51) Int. Cl<sup>s</sup>. B41J2/045

**PURPOSE:** To easily obtain a multi-orifice ink jet head simple in construction and small in size by a method wherein an ink drip is jetted out by applying a magnetic field to a permanent magnet mounted on an expansion film.

**CONSTITUTION:** When cores 5, 6 have polarities N, S, a restitution force is generated between the cores and a permanent magnet 8 disposed upwards thereof. The permanent magnet 8 is momentarily moved toward an ink jet port 10 while deflecting an expansion film 7. In this manner, a pressure is applied to an ink in an ink chamber 11 to jet out an ink drip 12 from the ink jet port 10 disposed upward of the ink chamber 11. Next, an electric conduction to print patterns 3, 4 is interrupted, whereby the expansion film 7 is returned to the former state by its elastic restoring force as well as a pressure constantly applied in the ink chamber 11. Therefore, the ink drip is jetted out of the ink jet port 10 corresponding to the permanent magnet 8 subjected to a magnetic field, whereby a predetermined output, such as characters and graphics, can be formed.

